REMARKS

In the non-final Office Action, the Examiner rejects claims 1-3, 8-11, 15-18, 20-21, 24, 26-27, 34 and 37-38 under 35 U.S.C. § 102(e) as being unpatentable over TWITCHELL (U.S. Patent No. 6,745,027); rejects claims 4-6, 12-14, 19, 22-23, 25, 33 and 35 under 35 U.S.C. § 103(a) as being unpatentable over TWITCHELL in view of BALACHANDRAN et al. (U.S. Patent Application Publication No. 2004/0230638); rejects claims 28 and 29 under 35 U.S.C. § 103(a) as being unpatentable TWITCHELL in view of BAHL et al. (U.S. Patent Application Publication No. 2004/0218580); and rejects claims 7 and 36 under 35 U.S.C. § 103(a) as being unpatentable over TWITCHELL in view of BALACHANDRAN et al., and in further view of BAHL et al.

Claims 1-38 are pending in the present application. Timely reconsideration and allowance of all claims in view of the following remarks are respectfully requested.

As an initial matter, it should be noted that the Office Action dated March 30, 2007 fails to address claims 30-32. Accordingly, claims 30-32 are believed to be in condition for allowance. An indication of the allowability of claim 30-32 is respectfully requested.

Rejections Under 35 U.S.C. § 102(e)

Claims 1-3, 8-11, 15-18, 20-21, 24, 26-27, 34 and 37-38 have been rejected under 35 U.S.C. § 102(e) as being unpatentable over TWITCHELL (U.S. Patent No. 6,745,027). Applicant respectfully traverses.

A proper rejection under 35 U.S.C. § 102 requires that a single reference teach every aspect of the claimed invention. Any feature not directly taught must be inherently present. In other words, the identical invention must be shown in as complete detail as contained in the claim. See M.P.E.P. § 2131. TWITCHELL does not disclose or suggest the combination of features recited in claims 1-3, 8-11, 15-18, 20-21, 24, 26-27, 34 and 37-38.

Independent claim 1 is directed toward a method for a given node to join an ad hoc network of a plurality of energy-conserving nodes, including transmitting a wake-up signal; receiving a message from one of the energy-conserving nodes in the network, the message including

information sufficient for the given node to determine how to join the network; and joining the network using the information. TWITCHELL does not disclose or fairly suggest the combination of features recited in claim 1.

For example, TWITCHELL does not disclose or suggest receiving a message from one of the energy-conserving nodes in the network, the message including information sufficient for the given node to determine how to join the network; and joining the network using the information, as required by claim 1. In rejecting claim 1, the Examiner reverses his position from the Office Action dated September 8, 2006 (stating that TWITCHELL fails to disclose the above-recited feature) and relies on Fig. 12, and col. 11, lines 57-64 of TWITCHELL for allegedly disclosing this feature. (Office Action – pg. 3). Applicant respectfully disagrees with the Examiner's interpretation of TWITCHELL.

At col. 11, lines 57-64, which describes Fig. 12, TWITCHELL discloses:

> With reference to FIG. 12, a first LPRF unit 1 wakes up and reads profile information stored in its memory, including a predefined class designation ("circle"). LPRF unit 1 then listens for transmission activity by other LPRF units of the same class. If nearby LPRF units of class circle have already formed a network, LPRF unit 1 will attempt to join the network. Otherwise, LPRF unit 1 attempts to organize an ad hoc network.

This section of TWITCHELL discloses that a low-power radio frequency (LPRF) unit wakes up and **reads** profile information **stored in its memory**. The LPRF unit then listens for activity by other LPRF units of the same class as that designated in the read profile information. If it identifies such units, it will attempt to join or create a network. This section of TWITCHELL does not disclose or suggest <u>receiving a message from one of the energy-conserving nodes</u> in the network, <u>the message including information sufficient for the given node to determine how to join the network</u>, as required by claim 1. Rather, the device of TWITCHELL appears to read class information from its own memory, and use the class information to identify other nodes with which it may network. Clearly, the reading of a profile from memory of TWITCHELL is not equivalent to receiving a message from a one of the energy-conserving nodes in the network, as recited in claim 1.

For at least these reasons, claim 1 is not anticipated by TWITCHELL. Reconsideration of the outstanding rejection and allowance of claim 1 are respectfully requested.

Claims 2, 3, 8-11, 15, and 16 depend from claim 1 and are therefore not anticipated by TWITCHELL for at least the reasons set forth above with respect to claim 1. Moreover, these claims are patentable for additional reasons of their own.

For example, TWITCHELL does not disclose or suggest powering on a bellringer transmitter, transmitting a wake-up signal, and powering off the bellringer transmitter, as recited in claim 2. In rejecting claim 2, the Examiner indicated that col. 7, lines 26-30 of TWITCHELL allegedly discloses powering on a bellringer transmitter, col. 3, lines 1-12 of TWITCHELL allegedly discloses transmitting a wake-up signal, and col. 7, lines 7-10 of TWITCHELL allegedly discloses powering off the bellringer transmitter. (Office Action, pg. 3). Applicant respectfully disagrees with the Examiner's interpretation of TWITCHELL.

Col. 7, lines 26-30 of TWITCHELL discloses:

> With reference to FIG. 2, upon power up, a first LPRF of a predetermined class initially listens for transmissions of other LPRFs 210, which would indicate the presence of an ad hoc network.

This section of TWITCHELL merely discloses that, upon wake-up, a LPRF unit listens for transmissions from other LPRFs. This section of TWITCHELL does not disclose or even remotely suggest powering on a bellringer transmitter, as recited in claim 1. In fact, it would appear that the LPRF transmissions being listened for are routine unit transmissions continually transmitted by the LPRF units.

Col. 3, lines 1-12 of TWITCHELL discloses:

> The profile and, in particular, the class designation are used by the wireless transceiver to selectively receive packets intended for receipt by transceivers of the same class designation (including/class/subclass). Typically, messages or commands are transmitted to a class (or subclass) of nodes by broadcasting or multicasting the commands in packets that begin with a preamble including the class designation information and possibly other profile information. Transceivers within range of the transmitting transceiver will wake up from a standby mode to receive and process an entire packet only when the packet's preamble matches the receiving transceiver's class designation.

This section of TWITCHELL discloses that receiving units will "wake-up" from a standby mode when received packets include a preamble matching its own class. This section of TWITCHELL does not disclose transmitting a wake-up signal, as recited in claim 2. Rather, it would appear that

all transmissions from a unit will include a preamble having information suitable for waking up a neighboring unit.

Col. 7, lines 7-10 of TWITCHELL disclose:

In one embodiment, a Walsh code is assigned to each class definition and provided to LPRF units of the class. Walsh codes are well understood in the field of digital wireless communications and, therefore, require only a brief explanation here.

This section of TWITCHELL discloses that a Walsh code is provided to each LPRF in a class. TWITCHELL goes on to disclose that Walsh codes are used to encode data packets and to designate the class of LPRFs that are enabled to receive and decode a particular packet of data. The association of Walsh codes with class designation information facilitates reduced battery consumption in LPRFs by utilizing message targeting methods requiring very little processing power. The use of Walsh codes also improves data security by encoding of messages. This section of TWITCHELL does not disclose or even remotely suggest powering off a bellringer transmitter, as recited in claim 2.

For at least these additional reasons, claim 2 is not anticipated by TWITCHELL. Reconsideration of the outstanding rejection and allowance of claim 2 are respectfully requested.

Furthermore, TWITCHELL does not disclose or suggest waiting to receive the message from the one of the energy-conserving nodes, and receiving the message from the one of the energy-conserving nodes, the message including information regarding a time when at least one node of the energy-conserving nodes is available to receive messages, as recited by claim 3. In rejecting claim 3, the Examiner indicated that col. 11, lines 57-64 of TWITCHELL allegedly discloses these features. (Office Action, pg. 3). Applicant respectfully disagrees with the Examiner's interpretation of TWITCHELL.

As reproduced above, col. 11, lines 57-64 of TWITCHELL discloses that a low-power radio frequency (LPRF) unit wakes up and reads profile information stored in its memory. The LPRF unit then listens for activity by other LPRF units of the same class as that designated in the read profile information. If it identifies such units, it will attempt to join or create a network. This section of TWITCHELL does not disclose or suggest waiting to receive the message <u>from the one</u>

of the energy-conserving nodes, and receiving the message <u>from the one of the energy-conserving nodes</u>, as recited by claim 3.

Even assuming *arguendo* that TWITCHELL may be fairly construed as disclosing waiting for and receiving a message from one of the energy-conserving nodes (a point that Applicant strenuously does not concede), this section of TWITCHELL clearly does not even remotely disclose or suggest that the message includes information regarding a time when at least one node of the energy-conserving nodes is available to receive messages, as recited in claim 3. The "profile" of TWITCHELL, which the Examiner appears to correlate to the message of claim 1 does not include information regarding a time when at least one node of the energy-conserving nodes is available to receive messages, as recited by claim 3. Rather, the profile of TWITCHELL appears to include only a class designation for the LPRF unit in which it is stored.

For at least these additional reasons, claim 3 is not anticipated by TWITCHELL.

Reconsideration of the outstanding rejection and allowance of claim 3 are respectfully requested.

Independent claims 17, 20, 26, 34, and 37 recite features similar to, but possibly different in scope than, claim 1. Accordingly, claims 17, 20, 26, 34, and 37 are not anticipated by TWITCHELL for at least reasons similar to those set forth above with respect to claim 1. Reconsideration of the outstanding rejection and the timely allowance of claims 17, 20, 26, 34, and 37 are respectfully requested.

Claim 18 depends from claim 17 and is therefore not anticipated by TWITCHELL for at least the reasons set forth above with respect to claim 17. Reconsideration of the outstanding rejection and allowance of claim 18 are respectfully requested.

Claims 21 and 24 depend from claim 20 and are therefore not anticipated by TWITCHELL for at least the reasons set forth above with respect to claim 20. Reconsideration of the outstanding rejection and allowance of claims 21 and 24 are respectfully requested.

Claim 27 depends from claim 26 and is therefore not anticipated by TWITCHELL for at least the reasons set forth above with respect to claim 26. Reconsideration of the outstanding rejection and allowance of claim 27 are respectfully requested.

Claim 38 depends from claim 37 and is therefore not anticipated by TWITCHELL for at least the reasons set forth above with respect to claim 37. Reconsideration of the outstanding rejection and allowance of claim 38 are respectfully requested.

Rejections Under 35 U.S.C. § 103(a)

Claims 4-6, 12-14, 19, 22-23, 25, 33 and 35 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over TWITCHELL in view of BALACHANDRAN et al. (U.S. Patent Application Publication No. 2004/0230638). Applicant respectfully traverses.

Claims 4-6 and 12-14 depend from claim 1. The disclosure of BALACHANDRAN et al. does not remedy the deficiencies of TWITCHELL noted above with respect to claim 1. Accordingly, claims 4-6 and 12-14 are patentable over the combination of TWITCHELL and BALACHANDRAN et al. for at least the reasons set forth above with respect to claim 1.

Claim 19 depends from claim 17. The disclosure of BALACHANDRAN et al. does not remedy the deficiencies of TWITCHELL noted above with respect to claim 17. Accordingly, claim 19 is patentable over the combination of TWITCHELL and BALACHANDRAN et al. for at least the reasons set forth above with respect to claim 17.

Claims 22, 23 and 25 depend from claim 20. The disclosure of BALACHANDRAN et al. does not remedy the deficiencies of TWITCHELL noted above with respect to claim 20. Accordingly, claims 22, 23, and 25 are patentable over the combination of TWITCHELL and BALACHANDRAN et al. for at least the reasons set forth above with respect to claim 20.

Claim 33 depends from claim 32; however, claim 32 has not been rejected in the present Office Action. Accordingly, Applicant respectfully submits that claim 33 is patentable over the cited references for at least the reason as claim 32. Reconsideration of the outstanding rejection and allowance of claim 33 are respectfully requested.

Claim 35 depends from claim 34. The disclosure of BALACHANDRAN et al. does not remedy the deficiencies of TWITCHELL noted above with respect to claim 34. Accordingly, claim 35 is patentable over the combination of TWITCHELL and BALACHANDRAN et al. for at least the reasons set forth above with respect to claim 34.

Claims 28 and 29 have been rejected under 35 U.S.C. § 103(a) as being unpatentable TWITCHELL in view of BAHL et al. (U.S. Patent Application Publication No. 2004/0218580). Applicant respectfully traverses.

Claims 28 and 29 depend from claim 26. The disclosure of BAHL et al. does not remedy the deficiencies of TWITCHELL noted above with respect to claim 26. Accordingly, claims 28 and 29 are patentable over the combination of TWITCHELL and BAHL et al. for at least the reasons set forth above with respect to claim 26.

Claims 7 and 36 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over TWITCHELL in view of BALACHANDRAN et al., and in further view of BAHL et al. Applicant respectfully traverses.

Claim 7 depends from claim 5. The disclosure of BAHL et al. does not remedy the deficiencies of TWITCHELL and BALACHANDRAN et al. noted above with respect to claim 5. Accordingly, claim 7 is patentable over the combination of TWITCHELL, BALACHANDRAN et al., and BAHL et al. for at least the reasons set forth above with respect to claim 5.

Claim 36 depends from claim 35. The disclosure of BAHL et al. does not remedy the deficiencies of TWITCHELL and BALACHANDRAN et al. noted above with respect to claim 35. Accordingly, claim 36 is patentable over the combination of TWITCHELL, BALACHANDRAN et al., and BAHL et al. for at least the reasons set forth above with respect to claim 35.

Conclusion

As Applicant's remarks with respect to the Examiner's rejections are sufficient to overcome the rejections, Applicant's silence as to assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, etc.) is not a concession by Applicant that such assertions are accurate or such requirements have been met, and Applicant reserves the right to analyze and dispute such assertions/requirements in the future.

In addition, as Applicant's remarks with respect to the base independent claims are sufficient to overcome the Examiner's rejections of all claims dependent therefrom, Applicant's silence as to the Examiner's assertions with respect to dependent claims is not a concession by Applicant to the Examiner's assertions as to these claims, and Applicant reserves the right to analyze and dispute

such assertions in the future.In view of the above, each of the claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Applicant believes no fee is due with this request. However, if a fee is due, please charge our Deposit Account No. 18-1945, under Order No. BBNT-P01-266 from which the undersigned is authorized to draw.

Dated: June 29, 2007   Respectfully submitted,

                                                By

                                                Edward A. Gordon
                                                Registration No.: 54,130
                                                FISH & NEAVE IP GROUP, ROPES & GRAY
                                                    LLP
                                                One International Place
                                                Boston, Massachusetts 02110
                                                (617) 951-7000
                                                (617) 951-7050 (Fax)
                                                Attorneys/Agents For Applicant